

19990813.qrp v01_n547.qrl.990813

Date: Fri, 13 Aug 1999 19:03:05 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1547

QRP-L Digest 1547

Topics covered in this issue include:

- 1) [47433] 1:4 Balun & scanner
by Bob Edwards <w4ed@gis.net>
- 2) [47434] Re: Not quite QRP? - detection of QRP Microwave energy, Paper?
by "Steve Yates, AA5TB" <aa5tb@swbell.net>
- 3) [47435] Attach. to Daily digest, & Ten Tec
by "rohre" <rohre@arlut.utexas.edu>
- 4) [47436] Great news.... continued
by hamjoel@juno.com
- 5) [47437] Re: Attach. to Daily digest, & Ten Tec
by GElam30092@aol.com
- 6) [47438] Larry Wise and Ugly TT-2
by Bob Hightower <ki7mn@extremezone.com>
- 7) [47439] ZM-2 troubleshooting
by Scott Gregson - KC7MAS <emtech@steadynet.com>
- 8) [47440] 2N2 Homebrewer's Certificate - Arrived!
by "Dennis Payton" <dpayton@fwi.com>
- 9) [47441] It's Alive! (norcal40A part 2!)
by "Cory Zito" <czito@execpc.com>
- 10) [47442] Re: Wien Bridge Oscillator
by Jeff Furman <jfurman@ocs.net>
- 11) [47443] Re: Wien Bridge references
by Jeff Furman <jfurman@ocs.net>
- 12) [47444] Quash that foul Fox Hunt rumor!
by "Bruce Prior" <n7rr@hotmail.com>
- 13) [47445] Dan's Small Parts and Kits
by Jerry Parker <jparker@fix.net>
- 14) [47446] Vertical Radiation pattern
by "Dieter Gentzow - WB8QYY" <wb8qyy@one.net>
- 15) [47447] SWR Bridge Kit
by Wb4jjj@aol.com
- 16) [47448] Antenna question
by "Edward A Kwik jr" <eakwikjr@hti.com>
- 17) [47449] Re: Vertical Radiation pattern
by "Dieter Gentzow - WB8QYY" <wb8qyy@one.net>
- 18) [47450] Re: Antenna question
by "John J. McDonough" <jjmcd@tm.net>
- 19) [47451] Re: Not quite QRP? - detection of QRP Microwave energy, Paper?

- by Chris Cartwright Sr <ccart@phideaux.com>
- 20) [47452] Brass Racer EK-1 F S
by Goemans <jgoemans@facstaff.wisc.edu>
- 21) [47453] CFA antenna--too good to be true?
by "Mark Paley" <mpaley@wcnet.org>
- 22) [47454] correct URL for antennex
by "Mark Paley" <mpaley@wcnet.org>
- 23) [47455] fox hunt Teams
by Bruce Rattray <rattray@gpfn.sk.ca>
- 24) [47456] Re: CFA antenna--too good to be true?
by Chris Trask <ctrask@primenet.com>
- 25) [47457] antenna patterns
by "Chuck Adams K7Q0" <adams@ticnet.com>
- 26) [47458] G5RV question
by "Steven Weber" <kd1jv@moose.ncia.net>
- 27) [47459] Re: Not quite QRP? - detection of QRP Microwave energy, Paper?
by "Steven Weber" <kd1jv@moose.ncia.net>
- 28) [47460] Useful site
by "Frank G3YCC" <frank@g3ycc.karoo.co.uk>
- 29) [47461] FREE all band QRP TX, using your computer.
by "Bob Duckworth" <wb4mnf@atl.org>
- 30) [47462] Spam
by Roger Hightower <n7kt@earthlink.net>
- 31) [47463] Further Antenna work.
by Ed Loranger <we6w@qsl.net>
- 32) [47464] DX QSL Guide
by charles k brown <n4so@juno.com>
- 33) [47465] Noodles, Bears and QRP in the Maine Woods
by John Harper AA5YX/2 <aa5yx@juno.com>
- 34) [47466] SV: G5RV question
by "Hans Sundstrom" <hans.sundstrom@telia.com>
- 35) [47467] Soldering Iron Sale
by Rich Vizcarra <RVizcarra@Filss.com>
- 36) [47468] OT: Vanity Call Procedure?
by "Joel Kluender, NF9K" <nf9k@eudoramail.com>
- 37) [47469] Mobile Foam Goes Home QQ Article!
by Ed Loranger <we6w@qsl.net>
- 38) [47470] RE: Mobile Foam Goes Home QQ Article!
by "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
- 39) [47471] Multi-banding Moxon Rectangles
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 40) [47472] FS/FT - Sort of off topic
by "Jerry Decker N5RV" <n5rv@hex.net>
- 41) [47473] FS TT 260 supply
by "Ronald Hands" <rhands@hwcnet.org>
- 42) [47474] G5RV question answerd
by "Steven Weber" <kd1jv@moose.ncia.net>

Date: Thu, 12 Aug 1999 19:17:27 -0400
From: Bob Edwards <w4ed@gis.net>
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [47433] 1:4 Balun & scanner
Message-ID: <37B35607.F829A2B4@gis.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

1:4 Balun question came up a few weeks ago, so here's a late post against that, a www page with a picture, below, fwiw...

Was curious how my new USB scanner would pick up a 3D object, and the balun was a useful test case. About 1/4 " away from the surface, appears to be its limit of focus. Notice the lower left wire as it moves away from the glass.

http://www.qsl.net/w4ed/rbe_ant.htm

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Bob	72/73	/
email, w4ed@amsat.org		/
http://www.qsl.net/w4ed		/K2 \
nr Atlanta, GA	EM73wt	/ / 21 \
		/_ /_ __ __\
~~~~~		[\-----/

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Date: Thu, 12 Aug 1999 18:25:51 -0500  
From: "Steve Yates, AA5TB" <aa5tb@swbell.net>  
To: <ke3fl@juno.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>, <csmallwood@marsh-mcBirney.com>  
Subject: [47434] Re: Not quite QRP? - detection of QRP Microwave energy, Paper?  
Message-ID: <002101bee51a\$07926e60\$f337a497@aa5tb>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Phil & Chuck,

I don't have information on the simple "test paper" you speak of but I do have information that may be useful.

There is a paper in the 1997 proceedings of the Antenna Measurement Techniques Association's symposium called "RADIO FREQUENCY (RF) VISUAL DETECTION CONCEPT". It represents a concept for the visualization of RF. Without going into great detail, basically radio waves impact an energy absorbing material (a transparent carbon impregnated sheet of about 1500 to 5000 ohms per square) and a very small amount of heat is generated. The heat is transferred via a heat conductive adhesive to a back plane of a liquid crystal sheet. This ultimately projects the "pattern" of the RF wave impacting the carbon sheet.

This method is wavelength independent and has been used up to 100 GHz. I suspect the low frequency limit is based on the size of the material and power of the source. At some wavelengths the carbon sheet / liquid crystal display may produce resonances that could cause problems. Signals as low as 30 milliwatts per centimeter squared have been observed according to the paper.

No comments on near field versus far field effects were given. In near field tests I would think one would have to be careful since the "sheet" may modify the near field structure. This may not be of concern in some applications. I suspect the material placed in modern batteries to check the condition of the battery may be useful since it is thermally activated but may not have an appropriate impedance or take too much energy.

Contact information is as follows:

Dr. Al Torres  
Mission Research Corporation  
3975 Research Blvd.  
Dayton, OH 45430-2108  
Phone: (937) 429-9261  
FAX: (937) 429-2625  
E-mail: atorres@mrccday.com

I hope this information helps.

73,  
Steve Yates - AA5TB  
Fort Worth, TX - EM12gs  
<http://home.swbell.net/aa5tb>

-----  
Date: 12 Aug 1999 19:07:18 -0500  
From: "rohre" <rohre@arlut.utexas.edu>  
To: qrp-l@lehigh.edu

Subject: [47435] Attach. to Daily digest, & Ten Tec  
Message-ID: <n1277637608.66064@msmailgw1.arlut.utexas.edu>

Anyone know why there was another enclosure with the digest today, called "winmail.dat"?

All such mystery enclosures go to the bit bucket unopened here, because of the virus scares. Please, all remember to turn off enclosures, html, etc. when you post to qrp-l, AND REQUOTING. Our RQQ is going up again, and Mel and I are noticing excessive bytes, :-) Note SMILES. No offense please.

RQQ is the excessive "ReQuoting Quotient" found by editing out requotes and seeing what the ratio of original digest was to the parsed version!  
Hey, less revolutions of my disk, and longer before it lets the smoke out!

On a trivia QRP note, just looked up the Power Mite series for a new owner of same. Ten Tec offered no less than 7 models, options or variants of this transceiver. Started as PM1, and went to PM 3A, but the model no. does not appear on some of them (at least on the front).  
The PM1 was same as PM2, but less case. My source is the Unofficial Ten Tec site, <<http://asd.state.va.us/tentec/>>

Were there any other QRP radios with so many variants?

72, Stuart K5KVH

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Date: Thu, 12 Aug 1999 21:50:27 -0400  
From: hamjoel@juno.com  
To: qrp-l@lehigh.edu  
Subject: [47436] Great news.... continued  
Message-ID: <19990812.215028.-197689.0.hamjoel@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

hi folks

Just a follow up note on the qrp to qrp sstv qso earlier today.. forty meters perked up and I went to 10 over 9 at five watts to I went down to .4... point 4 watts and sent a picture to ka2hzo who was about 4 to 500 miles away... he got my ID and the first part of the picture then the band went down....

boy I thought I had that thousand miles per watt in the bag... missed it by about 60 seconds... or less... oh the excitement of it all...

My cajun mama is fixing to coat my antenna with some crawfish stew... she says that ought to get the signal perking....

Joel KE1LA  
In Maine

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Get the Internet just the way you want it.  
Free software, free e-mail, and free Internet access for a month!  
Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

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Date: Thu, 12 Aug 1999 21:55:11 EDT  
From: GElam30092@aol.com  
To: rohre@arlut.utexas.edu, qrp-1@lehigh.edu  
Subject: [47437] Re: Attach. to Daily digest, & Ten Tec  
Message-ID: <b3621245.24e4d4ff@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

My apologies..... it was probably from a message that I posted. I've been trying to post a message for the last several days and finally tried it from my work address. I don't know why it occurred but it won't happen again. I can just about guarantee that my employer keeps our virus definitions fully up to speed.

Again, I am sorry.

Gerry Elam  
PHX AZ

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Date: Thu, 12 Aug 1999 18:53:38 -0700  
From: Bob Hightower <ki7mn@extremezone.com>  
To: qrp-1@lehigh.edu  
Subject: [47438] Larry Wise and Ugly TT-2  
Message-ID: <199908130203.TAA17587@enterprise.extremezone.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Larry Wise is on the road, and asked me to post this to the list for him:

Subject: Ugly Tuna Tin - 2 QSOs.....

Hi gang... Here in Michigan after the Ft Tuthill fest and a stop in MN to visit relatives....

Last week fired up the UGTT-2 while camping at Ionia State Rec Area at Ionia MI and made several contacts.... First one to Dayton, OH, then a couple of others.....Ant 40 dipole at 16' (flagpole) in the center and about 20-25 feet on the ends.....

Last Sat was the Pig Roast and party for the Brother-in-law's 44th anniversary(sp) and we gorged ourselves....ummmmm :-)  
Finally recovered on Monday.....

Got an antenna up here at the Brother-in-law's place yesterday and made a couple of more UGTT-2 contacts.... Will be trying for more contacts the rest of this week....Thru Sun.....  
Crystal freqs are about 7.04033 and 7.04075 as read out on the TS-450SAT...

Ed Hare gave me that lower crystal at Flagstaff to get on his freq, but it don't seem to go down to his freq in my rig.....  
Will listen down for you Ed.....

QTH is about 3 miles south of Belleville MI in southeast MI nr Detroit....

Antenna is a 40 dipole up about 25 feet.....

Will be operating off and on all day and early evenings.....

Hope to QSO some of you.....

By the way, picked up an MFJ-9015 at Flagstaff and had it on the air in Ionia too.....15 was hopping.....Worked a Russian using the 9015 and the 40 dipole....Heard all kinds of stuff even at midnight....

Sounds like the high bands are back in fine fettle... :-)

Hope to get back on the list tomorrow and catch up.....

Larry KA5T/8 MI  
ka5t@arrl.org

Bob Hightower KI7MN

<http://www.extremezone.com/~ki7mn>

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Date: Thu, 12 Aug 1999 19:12:12 -0700  
From: Scott Gregson - KC7MAS <emtech@steadynet.com>  
To: qrp-l <qrp-l@lehigh.edu>

Subject: [47439] ZM-2 troubleshooting  
Message-ID: <37B37EFC.961B62A0@steadynet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

I just sent this to a guy to help troubleshoot his ZM-2. I may have worded this in a difficult manner, or overlooked something (for that matter I'm so tired I could have totally glitched!). I would like suggestions, I will put this on the Emtech site for future reference (once tweaked). Unless I have the unit in hand and know how it acts when operation is attempted, I use the "do the easiest thing first" method (just in case my logic doesn't seem logical to you guys).

#####

I'd do the following (If you cannot find any open connections visually):

1. Check for continuity between the center banana posts, and also from center connection of UHF/BNC output connector to both banana post. (if not - open winding on T1 secondary or bad connection in that circuit)
2. Check Continuity between either banana post and ground (outside of the UHF/BNC connector) with the grnd switch on. (if not - connection 6 to SW2 or connection from SW2 to ground open)
3. Every connection from the red and green wires on T1 should read continuity to ground. you already checked the black winding above. (if not - T1 primary open or bad connection(s))
4. With ZM-2 disconnected from everything. Put into Tune mode, and check for continuity between the center connection for the Xmit (center of so-239 or BNC input) to the outside connection (ground). If no continuity then 2 (or more) of your resistors are zapped or bad connection through to ground.
5. Put into Operate mode. With positive lead connected to ground, measure resistance to the connection between T2 and the 1k resistor - should get about 25 ohms. (if open - T2 is open or bad connection). Check the other side of the 1k resistor you should get about 1k ohms. (if not - replace the 1k resistor). Check the other side of D2 (between D1 and D2), you should get a high reading maybe 850K ohms (if not- D2 open replace). To check the D1 put 1.5 to 3 volts across it it should light (put positive between D1 and D2).

Be careful here! If your rig is not tolerant of some short term SWR this could zap your final. This is in lieu of removing the Poly-caps and testing with a capacitance tester (preferred!!! method)



6. Attach RF watt meter between ZM-2 and transmitter, attach ant/dummy-load to ZM-2. Key for a second - note the Rf output level. Now attach ZM-2 directly to rig and watt meter between ZM-2 and ant/dummy load. Key for a second and while operating each cap individually (complete span of movement) note RF level. If there is only a slight loss then your problem is not the tuning caps (maybe). If there is not RF output or very much diminished output, or if measured SWR is really high, then your poly-caps are shorted and or arcing - replace them.

7. The caps can short out. You can check for a short in each cap by doing the following, flip SW1 to ADD 500pf. Flip Tune/Operate to Tune. Check for continuity from the center connection on the input UHF/BNC connector to ground while operating each cap. If the meter shows even momentary continuity a cap is shorted. If not flip SW1 to ADD 250PF, repeat test. If continuity then cap C1 is bad/shorted.

Sometimes the caps won't show a short but will arc during operation, they are no good and must be replaced.

#####

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Scott Gregson - KC7MAS  
emtech@steadynet.com  
<http://emtech.steadynet.com>

+++++

Scott Gregson Co. / Emtech / CFC  
1127 Poindexter Ave W  
Bremerton, WA 98312

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Date: Thu, 12 Aug 1999 21:58:16 -0500  
From: "Dennis Payton" <[dpayton@fwi.com](mailto:dpayton@fwi.com)>  
To: <[qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)>  
Subject: [47440] 2N2 Homebrewer's Certificate - Arrived!  
Message-ID: <003401bee537\$bedd78e0\$2aa854d1@locke>  
MIME-Version: 1.0  
Content-Type: text/plain;  
    charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

I received my "2N2 Homebrewers Certificate" today and was astonished! You'd have to look on a lot of walls to find a better looking certificate. Now I wish I'd sent a large size SASE so Preston wouldn't have had to fold it to fit inside the business size envelope. I don't have much room for stuff on the walls of my shack but this one's definitely going up. THANKS PRESTON!

My main reason for building the rig was to try Manhattan construction (God only knows I didn't need another forty meter QRP transceiver!), but I also wanted to hear how the rig played. Even after hearing all the good reports about it, I was impressed. All that performance with just twenty-two active devices and all of them being 2222's. Amazing! I look forward to letting fellows check out the rig, then popping the top and asking, "Notice anything unusual?". :-)

A big thanks to Jim, who after designing and building it, put in a tremendous amount of work to help guys like me also build it. And Paul, I didn't fully appreciate all the work he did (I wonder how many hours) until I started using the book to build it. I'm afraid if QST ever discovers him we're finished!

Again, THANKS to all involved.

Denny Payton, N9JXY  
Auburn, IN

-----  
Date: Thu, 12 Aug 1999 22:31:38 -0500 (CDT)  
From: "Cory Zito" <czito@execpc.com>  
To: qrp-l@lehigh.edu  
Subject: [47441] It's Alive! (norcal40A part 2!)  
Message-ID: <199908130331.WAA25886@earth.execpc.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hi all,

As I mentioned a week or two ago, I just build a Norcal40A, but wasn't sure if it was putting out any signal as I had been able to make no contacts with it. Well, after a much awaited package arriving yesterday, and a few hours of work, I have a nice WM-2 wattmeter to confirm that the rig is indeed working... It also let me know that my antenna needs work, as the antenna had a lot of reflected power (DOH!) Next up is fixing my antenna, and then putting together the freq counter kit (DD-1) to figure out where on 40 I am! :)

Having a ball, and haven't even made a qrp contact yet!

73 de Cory AA9GB Kenosha, WI

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Date: Thu, 12 Aug 1999 21:18:35 -0700 (PDT)  
From: Jeff Furman <jfurman@ocs.net>  
To: tbowman@nbn.net, qrp-1@lehigh.edu  
Subject: [47442] Re: Wien Bridge Oscillator  
Message-ID: <Pine.LNX.4.04.9908121827210.18382-100000@ocs.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Tom,

The best feature of the Wein bridge oscillator is its low gain requirement, namely, 3. In contrast, the typical three section phase shift oscillator with equal R's and C's requires a gain of 29. A phase shift network with R's increasing and C's decreasing in the same ratio can approach a required gain of 8. Decoupling each RC phase shift network with a buffer requires a gain of exactly 8. There is a comparative analysis in Valley&Wallman, "Vacuum Tube Amplifiers", MIT Rad Lab Series, Vol. 18.

Another nice feature of the Wien bridge is the ease of tuning: the typical network uses equal R's and equal C's, and only two (R or C) need to be ganged for tuning. The phase shift oscillator needs three elements to be ganged; the twin tee network also needs three elements ganged, but they must keep the value ratios 1:2:2 (or 2:1:1) during tuning, even worse than the phase shift network. Hall's network, invented by an engineer at General Radio, can be tuned in a decade range with a single pot, but it is very nonlinear. I haven't seen it used in oscillators yet, just tuned amplifiers.

The Wien bridge shares with other RC tuned oscillators the useful property of the frequency is proportional to  $1/(R \cdot C)$  while LC oscillators' frequency is proportional to  $\sqrt{1/(L \cdot C)}$ . This means that a decade frequency range is a 10:1 C ratio for an RC, but a difficult to arrange 100:1 C ratio for an LC oscillator.

The relatively low distortion of the Wien bridge oscillator is due to the able agc capability of the humble tungsten lamp. I believe Bill Hewlett wrote his MS thesis on the oscillator with this agc method.

I think Hewlett invented the clever feedback topology with the lamp. Valley&Wallman has an analysis of distortion of various oscillator networks.

Try this as a simple example; it uses a pair of diodes instead of a tungsten lamp, also, the bias might be adjusted a bit-- note  $r_1=r_5$ ,  $r_2=r_6$ , and  $c_1=c_2$ ; a lamp in series with a big cap across  $r_3$  may work in place of the diode branch across  $r_4$ :

C1 2 0 .0047UF  
C2 5 6 .0047UF  
C3 8 4 1UF  
D1 7 5 D1N4148 any ordinary diode

D2 5 7 D1N4148  
Q1 3 2 4 _2N3904 (c b e) any live NPN  
Q2 5 3 1 _2N3906 PNP  
R1 1 2 330K  
R2 2 0 68K  
R3 4 0 470  
R4 5 4 1K  
R5 2 6 330K  
R6 2 6 68K  
R7 7 8 10K  
V1 1 0 9 (+ - battery)

I hope I have addressed some of your concerns.

73, Jeff KD6MNP

On Thu, 12 Aug 1999, Tom Bowman wrote:

> Jeff,  
>  
> What are the advantages of the Wien bridgeoscillator over  
> similar designs with the same (low) parts count?  
>  
> Tom, WA3REY  
>  
>snip  
> <>< Tom Bowman, WA3REY, Mount Gretna, PA 17064  
>  
> tbowman@mt-gretna.com QRP-L #125  
>  
> http://www.mt-gretna.com  
>

-----  
Date: Thu, 12 Aug 1999 21:35:23 -0700 (PDT)  
From: Jeff Furman <jfurman@ocs.net>  
To: alihermlem@hotmail.com, qrp-l@lehigh.edu  
Subject: [47443] Re: Wien Bridge references  
Message-ID: <Pine.LNX.4.04.9908122119310.18382-1000000@ocs.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Brad, here are some references I couldn't provide earlier:

the phase compensation tweak is shown briefly in:  
"Radio Engineering Handbook" 5th ed. Keith Henney, ed. 1959  
page 16-51, paragraph 41.  
He references this paper:  
"A Note on Precision Decade Oscillators" Davidson, J. A. B.,  
Proc. IRE correspondence Sept. 1952, p.1124.

The oscillator squegging is addressed in:  
"Functional Circuits and Oscillators" Herbert J. Reich,  
Van Nostrand 1961, section 83.3 pp.365-366, and a  
large Wien bridge section 86 pp.384-391.

Reich's book covers oscillators exhaustively, showing dozens of types  
with many detailed analyses, as well as generic oscillator theory  
(for example, one-port vs. two-port comparisons, etc.)

73, Jeff KD6MNP

-----  
Date: Thu, 12 Aug 1999 22:27:53 PDT  
From: "Bruce Prior" <n7rr@hotmail.com>  
To: qrp-l@Lehigh.EDU, qrp-canada@lists.gpfn.sk.ca  
Subject: [47444] Quash that foul Fox Hunt rumor!  
Message-ID: <19990813052754.44463.qmail@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Quash that nasty, foul, scurrilous rumor! It is absolutely untrue that the  
new Fox Hunt team, the MANGY MUSHERS, transmits powerful emanations for  
which a double-barreled olfactory apparatus is necessary for detection.  
Although it IS true that the team salivates 5 watts of RF, the OTHER sort of  
emissions are entirely negligible. In fact, each and every MANGY MUSHER  
subjects himself to aqueous libations at regular intervals. What ARE the  
actual intervals? Now, now, the team must guard SOME of its secrets in  
order to STAY in the RACE. Let it now and forever hereafter be known  
throughout QRPland that the MANGY MUSHERS are a KLEEN TEEM. We also give  
honest signal reports.

Its members are:

Pete Burbank from Harrodsburg, Kentucky - NV4V He has a call that s a  
dit-counter s nightmare, but it has great rhythm.  
Paul Erickson from Vancouver, British Columbia - VE7CQK Would you believe  
he s lived in Afghanistan?  
Ed Lawson from Belmont, New Hampshire - K1VP This authentic musher drives a

real malamut-powered dog sled.

Bruce Prior from Blaine, Washington - N7RR He s lived in Tajikistan. Have you committed that prefix to memory?

72, Bruce Prior

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Date: Thu, 12 Aug 1999 22:43:18 -0700  
From: Jerry Parker <jparker@fix.net>  
To: qrp-1@LeHigh.edu  
Cc: jparker@fix.net  
Subject: [47445] Dan's Small Parts and Kits  
Message-ID: <3.0.6.32.19990812224318.0086ec90@fix.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Dan has made over 100 changes in his page

and has also added a navigator so you can around his

huge page easily and find what you want.

Check it out: <http://www.fix.net/dans.html>

Enjoy,,,72,,,Jerry...WA6OWR...K

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Date: Fri, 13 Aug 1999 08:02:45 -0400  
From: "Dieter Gentzow - WB8QYY" <wb8qyy@one.net>  
To: <qrp-1@lehigh.edu>  
Subject: [47446] Vertical Radiation patern  
Message-ID: <001b01bee583\$c25242c0\$6401020a@lsiindustries.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hey Antenna Experts,

Can someone tell me what the radiation pattern would be for a 33 foot vertical at 7040 KHz with 9 - 33 foot ground radials spaced 22.5 degrees apart that occupy only 180 degrees of the antenna.

I can only put up radials on one side of the vertical. Someone else's property is on the other side of the vertical. I do not have any antenna programs, to test this. Maybe someone has done this already. Sure do not want to generate a lop-sided signal :-<

Best regards,

Dieter Gentzow WB8QYY  
Loveland, Ohio

-----  
Date: Fri, 13 Aug 1999 09:27:43 EDT  
From: Wb4jjj@aol.com  
To: qrp-l@lehigh.edu  
Subject: [47447] SWR Bridge Kit  
Message-ID: <c744f1ce.24e5774f@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Never had ordered from Dan's Small Parts and Kits, so studied his stuff and bought two kits...one for an antenna tuner and the other for an easy SWR bridge. Thought both might be useful for QRP in the fields and marshes.

Both kits came in brown bags...good parts for the most part (knobs for the tuner were skinny ones off a vernier dial minus the setscrews...but Dan will sell you an assortment of setscrews...hi!). Both were dirt cheap. Antenna tuner went together fine, but is limited by lack of roller inductor. Took a visit to Doug Demaw's archives to understand why this is so.

Anyway, the SWR bridge is from an article in HamBrew. Uses a differential action which works the forward power against the reflected power to make the meter move. Highest meter indication is lowest SWR. Only a handful of parts, two toroids to wind, and built it Manhattan style. Checked it out using clip leads, and worked fine except it's wildly inaccurate...probably

due to the fact that I clipped it uncased into my feedline using 12" long clip leads...which most likely put the impedance all in one chunk right at the bridge...hi!

More later on this interesting circuit. \$12.95 from Dan, including copy of article. Don't order until I let the list know when I get mine working.

73, Alan A. Wheeler  
WB4JJJ  
Fairfax, Virginia

-----  
Date: Fri, 13 Aug 1999 09:31:39 -0400  
From: "Edward A Kwik jr" <eakwikjr@hti.com>  
To: "qrp-l@Lehigh.EDU" <qrp-l@Lehigh.EDU>  
Subject: [47448] Antenna question  
Message-ID: <37B41E3B.DA024BD4@hti.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

I have a 105 ft center fed horizontal dipole at just under 40 feet. It is fed with 450 ohm window line all the way to the shack. I want to improve my 30 meter performance. I work short skip just fine but as the night progresses, I hear a lot of dx but not much luck in working them. The idea is to reduce the take off angle on 30. The dipole wire runs East to West. The West end uses a big tall spruce tree as the support. I am going to climb the tree tomorrow as high as I can go and reposition the West leg higher. I think I can get up to 60 feet. So, any ideas on how this will work? The West end at 60 feet and the East end at say 35 feet. I like the way it works on 40 and 20 and do not to do something that would reduce performance on these bands. Is higher always better?

Ed AB8DF

-----  
Date: Fri, 13 Aug 1999 09:50:35 -0400  
From: "Dieter Gentzow - WB8QYY" <wb8qyy@one.net>  
To: "qrp-l" <qrp-l@lehigh.edu>  
Subject: [47449] Re: Vertical Radiation patern  
Message-ID: <004b01bee592\$d2229420\$6401020a@lsiindustries.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit



Content-Transfer-Encoding: 7bit

Dave,

You know, there may be some gain. I will take a survey from some local elmers and get signal reading with just a ground rod. Later I'll take readings with 3,6 and 9 ground radials. More to come....

72 Dieter WB8QYY

----- Original Message -----

From: Dave Sjolín <sjolin@swbell.net>

To: <wb8qyy@one.net>

Sent: Friday, August 13, 1999 9:39 AM

Subject: Re: Vertical Radiation pattern

> Dieter Gentzow - WB8QYY wrote:

> >

> > Hey Antenna Experts,

> >

> > Can someone tell we what the radiation pattern would be for

> > a 33 foot vertical at 7040 KHz with 9 - 33 foot ground radials

> > spaced 22.5 degrees apart that occupy only 180 degrees of the antenna.

> >

> > I can only put up radials on one side of the vertical.

> > Someone else's property is on the other side of the vertical.

> > I do not have any antenna programs, to test this. Maybe

> > someone has done this already. Sure do not want to generate

> > a lop-sided signal :-<

>

> I don't have modeling software but from what I've read over the years I

> think you might see on the order of 4-5 db "gain" on the side with

> radials versus the side without.

>

> Be sure to let the rest of us know what you find out.

> 73 de Dave, N0IT

>

-----  
Date: Fri, 13 Aug 1999 09:47:26 -0400

From: "John J. McDonough" <jjmcd@tm.net>

To: <eakwikjr@hti.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [47450] Re: Antenna question

Message-ID: <002a01bee592\$632975c0\$010044c0@conor-mac-nessa>

MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Ed,

-----Original Message-----  
From: Edward A Kwik jr <eakwikjr@hti.com>

> Is higher always better?

No, except at VHF.

The radiation angle varies almost sinusoidally with height, but with significant dampening as you go up. By the time you reach about 2 wavelengths, height doesn't have so much of an effect.

Of course, since your antenna is sloped, and of course your ground isn't textbook, your mileage will vary. Putting the center at 50 feet could turn out to be a bad thing for 40 ... right now you're pretty close to 1/4 wave high, which is a pretty good thing. Given that your ground probably isn't perfect, you could be close to an electrical quarter wave.

You might try grabbing a copy of NEC2 off the net and modeling it to see what is the best compromise for you. You would need to make some assumptions about your ground of course, but at least you would get an idea about what to aim for.

72/73 de WB8RCR      <http://www.qsl.net/wb8rcr/>  
didileydadidah      QRP-L #1446 Code Warriors #35

-----  
Date: Fri, 13 Aug 1999 09:43:18 -0400 (EDT)  
From: Chris Cartwright Sr <ccart@phideaux.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [47451] Re: Not quite QRP? - detection of QRP Microwave energy, Paper?  
Message-ID: <Pine.LNX.4.04.9908130933400.21437-100000@dns.phideaux.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Aug 1999, Steve Yates, AA5TB wrote:

> I don't have information on the simple "test paper" you speak of but I do  
> have information that may be useful.

Hmmm... sounds kinda like thermal printer paper. Anyone have some "old" fax paper and a microwave oven handy? I never thought having plain paper fax machines would be a bad thing. Wonder what it does laying flat, and/or bunched up in a ball? Of course this is 600-900 watts at ~2 Ghz, but it might be interesting.

NOTE!! WARNING!!! CAUTION!!!! If you do decide to "test" this (at home or work) make sure you put a cup of water in there, then try it for 3 seconds... then 5 seconds.. then 7, you get the idea. And being chemically treated paper it could very well CATCH FIRE!!! Be ready! I think we just want see it darken in some sort of "wave" pattern on the paper.

Make sure after the smoke clears and the fire department lets you back in the building you tell us all about it here on QRP-L. And what makes me think Nils or Steve Weber might already know the answer to this <vbg>

72

-- Chris Cartwright, Technical Engineer | ccart@phideaux.com --  
-- N3XRV ARRL-VE Norcal Zombie #163 | Gaithersburg, MD FM19je --  
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --

-----  
Date: Fri, 13 Aug 1999 08:58:37 -0500  
From: Goemans <jgoemans@facstaff.wisc.edu>  
To: qrp-l@lehigh.edu  
Subject: [47452] Brass Racer EK-1 F S  
Message-ID: <3.0.2.32.19990813085837.0069d5c4@facstaff.wisc.edu>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hi gang,

Now that I have your attention, I,m selling my 10-yr old Vibroplex Brass Racer EK-1. That is the triangular-shaped Brass Racer like you can still buy but WITH an iambic keyer built into the base! The original keyer uses a Curtis 8044 chip and an ugly 7.5 volt battery but I have replaced that with a TiCK-1 keyer running on 2 coin cells! You get both the original board AND the TiCK-1 (SMT) board, plus the Vibroplex literature/parts list! I have changed the captive output cord to an RCA jack on the back where the original cord came out of

the base. Use any cable with it now! It works great but looks 10 years old (brass could use polishing). But some of us get better with age! :-)

First \$95 gets it, shipped (in conUS). You can't buy these new any more!

72, Paul WA9PWP

Paul Goemans WA9PWP  
1508 Sundt Lane Stoughton, Wi 53589

-----  
Date: Fri, 13 Aug 1999 10:11:59 -0700  
From: "Mark Paley" <mpaley@wcnet.org>  
To: "qrp-1" <qrp-1@lehigh.edu>  
Subject: [47453] CFA antenna--too good to be true?  
Message-ID: <001f01bee5ae\$f4ff6100\$bdab85cd@mpaley>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

I'm on the internet surfing around to get some antenna information when I come on this site:

[www.antennax.com/preview.htm](http://www.antennax.com/preview.htm)

It sounded too good to be true. So I went to this site to read the abstract:

[www.antennax.com/preview/cfa/nab99cfa.htm](http://www.antennax.com/preview/cfa/nab99cfa.htm)

I have a seriously lacking background in RF engineering but my sceptical/cynical mind had to ask two questions--

- 1) No mention of gain over the proverbial isotropic radiator--I may have missed this as the abstract was getting a little tedious to read.
- 2) The caveat in the building article whcih tells you they found a flaw, so you need to read the other nine articles which have the correct values, etc. and, of course, you have to pay \$47.97 for all of these articles and others.

My question is this--is this design too good to be true? Has anyone tried to make an antenna like this? IF so, what were the results?

If this design results in an antenna with any sort of gain it would be the perfect solution for me and my small lot.

Come on, let's hear the "rest of the story"...

Mark Paley--KF8KL--

K2 #250

mpaley@wcnet.org

<http://www.wcnet.org/~mpaley>

K2 #250

mpaley@wcnet.org

<http://www.wcnet.org/~mpaley>

-----  
Date: Fri, 13 Aug 1999 10:32:49 -0700

From: "Mark Paley" <mpaley@wcnet.org>

To: "qrp-1" <qrp-1@lehigh.edu>

Subject: [47454] correct URL for antennex

Message-ID: <002f01bee5b1\$e0476520\$bdab85cd@mpaley>

MIME-Version: 1.0

Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Content-Transfer-Encoding: 7bit

Sorry, the correct URL for antennex is:

<http://www.antennex.com>

K2 #250

mpaley@wcnet.org

<http://www.wcnet.org/~mpaley>

-----  
Date: Fri, 13 Aug 1999 08:58:50 -0600 (CST)

From: Bruce Rattray <rattray@gpfn.sk.ca>

To: QRP-Canada <qrp-canada@lists.gpfn.sk.ca>, Low Power Group <qrp-1@LeHigh.EDU>

Subject: [47455] fox hunt Teams

Message-ID: <Pine.LNX.3.95.990813084455.31219B-100000@neale.gpfn.sk.ca>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

The "Raiders of the Lost RF" 40 mtr fox hunt Team has an opening for one

more member....if interested please e-mail me.....present gun-cleanin',  
chawin' tabakie, dont-take-no-baths, wash-clothes-once-a-year, use tha  
outhouse-every-day, load-ar-own-ammanishon,  
carry-just-in-case-gun-don't-work-big-club,  
vaseline-covered-huntin'-boots, no-rain-coats,  
use-pine-tree-sap-ta-clean-ar-teeth; makes 'em smell guud!, I guess ya  
gets the picchur, members are Fred, VE3FAL, Earl, VE6EWM an Bruce,  
VE5RC.....

..72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272  
A-1 Operator Club - 10/10# 944 - 128 Durham Drive, Regina, SK.,  
S4S-4Z2, Canada-AR Stamp Collector- "QRP! How sweet it is!"

-----  
Date: Fri, 13 Aug 1999 08:01:10 -0700 (MST)  
From: Chris Trask <ctrask@primenet.com>  
To: Mark Paley <mpaley@wcnet.org>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [47456] Re: CFA antenna--too good to be true?  
Message-ID: <Pine.BSI.3.96.990813075856.27877A-100000@usr07.primenet.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Mark,

There is a great deal of information available about the CFA  
outside of Antennex which can be found in the technical bibliographies  
on my web page at:

<http://www.primenet.com/~ctrask/xfldant.html>

There is a tremendous amount of disinformation available as well,  
so be mindful of the source.

Chris

On Fri, 13 Aug 1999, Mark Paley wrote:

>  
> I'm on the internet surfing around to get some antenna information when I  
> come on this site:  
> [www.antennax.com/preview.htm](http://www.antennax.com/preview.htm)  
> It sounded too good to be true. So I went to this site to read the  
> abstract:  
> [www.antennax.com/preview/cfa/nab99cfa.htm](http://www.antennax.com/preview/cfa/nab99cfa.htm)

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Chris Trask / N7ZWY  
Principal Engineer  
ATG Design Services  
P.O. Box 25240

Technical Editor,  
QRP Quarterly  
QRP ARCI 9464

Graphics by Loek Frederiks

-----  
Date: Fri, 13 Aug 1999 10:21:34 -0500  
From: "Chuck Adams K7Q0" <adams@ticnet.com>  
To: qrp-1@lehigh.edu  
Subject: [47457] antenna patterns  
Message-ID: <E11FHx-000516-00@pop3.ticnet.com>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-Transfer-Encoding: 7BIT

Gang,

I see this a lot on the Internet and even sometimes in print.

For antenna patterns you have got to think in three dimensions, 3-D is good.

Everyone that has forgotten, go get your antenna book(s) and look up antenna radiation patterns and think about what you are looking at in the real world. Also understand what the takeoff angle means or how it is used.

I see where some people want to build an antenna system then have some friends some distance away (measured in miles most likely) listen to their signal and get reports. Sorry, but this not the correct way to do it.

Say you build an antenna system for DX that has a takeoff angle around 27 degrees or any figure you want to make up. Then you need to make measurements along what you think is the maximum direction and at 27 degrees for some distance that is far away from the antenna system to get away from near field effects. The only way I can visualize doing this in real life is to hire a helicopter and rent some expensive RF gear and fly around the antenna system and take data. Something that most of us wouldn't even seriously consider.

At horizontal angles from the antenna system, where your friends are located with their antenna systems, measures the wrong thing for what you are interested in. IMHO. It just gives you and idea of how the system works close in. So if the system doesn't work close in that doesn't mean it is not working for DX. Take a look at the RF pattern using modeling software. Because



of ground effects you don't see much in the horizontal directions.

In fact, if you post that you are getting excellent results on receiving DX then I'd say the antenna is working. This because of something called the principle of reciprocity. A good receiving antenna is a good transmitting antenna. A good absorber is a good radiator....

Simplified discussion and FYI.

I highly recommend you go to

<http://www.teleport.com/~w7el/>

and consider buying EZNEC (\$89 + \$3 US shipping and handling) for modeling antenna systems for a start. Of course, you have to have some idea of what modeling is all about so that you don't go off in the wrong direction. The best computers in the world will give you the wrong information if you don't know what you're doing or understand the nuances (sp?) of E&M. (Roy, you can pay me later.)

I've been using the software on a 486DX at 50MHz laptop and the desk system at 300MHz. The difference in speed is remarkable, so get the fastest computer you can afford in your budget if you are going to do some serious work. Time is money.

I am not an employee of W7EL's firm nor do I get any kickback for recommending his software. I use it and I haven't spent the money on any one else's software. I used EZNEC for a figures in a book and let's hope that I know what I'm doing.... :-) Also I hope that Roy will let me do that. Just thought I had better ask him before I do something stupid. Again.

As I said in Austin and other places. The #1 place to really spend money for a QRPer is in the antenna system. Of course, limited by real estate boundaries, CC&Rs, etc. A poor antenna will make your life much more miserable than you'd ever thought. :-)

FYI

Chuck Adams K7QO/5 [adams@ticnet.com](mailto:adams@ticnet.com) <http://www.qsl.net/k7qo/>

-----

Date: Fri, 13 Aug 1999 10:44:02 +0000

From: "Steven Weber" <kd1jv@moose.ncia.net>  
To: qrp-l@lehigh.edu  
Subject: [47458] G5RV question  
Message-ID: <199908131526.LAA26922@moose.ncia.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-Transfer-Encoding: 7BIT

Wondering if anyone has made a G5RV with 300 ohm twin lead feed,  
instead of the traditonal 450 ohm ladder line?

If so, what length twin lead needed for the 40/20 M shorty version  
and does the lenght of the wires need to be changed?

Reason I'm interested, is looking for a simple / effective 40/20  
Meter antenna for field operation. My G5RV works nice on both those  
bands, but the ladder line would be a pain to pack.

For the National Parks outing, I made a 40 M dipole with insulators  
at the 20 M point and used jumpers to switch between 40 and 20. Was a  
pain to lower the antenna to change bands and the clips didn't always  
make good contact, so need something better. If the G5RV with twin  
lead don't pan out, might just make a trap dipole.

72,  
Steve, KD1JV in the white Mountains of New Hampshire  
"melt solder"

-----  
Date: Fri, 13 Aug 1999 10:44:01 +0000  
From: "Steven Weber" <kd1jv@moose.ncia.net>  
To: qrp-l@lehigh.edu  
Subject: [47459] Re: Not quite QRP? - detection of QRP Microwave energy, Paper?  
Message-ID: <199908131526.LAA26934@moose.ncia.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-Transfer-Encoding: 7BIT

> Make sure after the smoke clears and the fire department lets you back in  
> the building you tell us all about it here on QRP-L. And what makes me  
> think Nils or Steve Weber might already know the answer to this <vbg>

Never tried putting fax paper in a microwave, but I can tell you not  
to try and dry a cotton bed sheet! Nearly set that on fire, got  
pretty scorched :-)

I can also tell you a small fluorecent light bulb puts on a good light show :-)

One way to test for leakage is to use a neon light, like a NE-2. If it glows when you run it around the door seal, you got some major leakage. I have a block of clear plastic with four neon lights inside it to tell if the magnatron is working and where hot spots are.

Personally, I woudn't worry about leakage. The door would have to be badly warped to let any micorwaves out and in that case, most likely the door interlocks would keep it from comming on.

In any event, I don't stand too close the nuker when its running :-)  
72,

Steve, KD1JV in the white Mountains of New Hampshire  
"melt solder"

-----  
Date: Fri, 13 Aug 1999 16:32:15 +0100  
From: "Frank G3YCC" <frank@g3ycc.karoo.co.uk>  
To: "GQRP-L" <gqrp@onelist.com>, "QRP-L" <qrp-l@lehigh.edu>  
Subject: [47460] Useful site  
Message-ID: <002401bee5a1\$06f88c00\$02ef5cc3@prsat0xl>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Very useful site:  
<http://www.dxbands.com/>  
73  
Frank, G3YCC  
QRP web page <http://www.karoo.co.uk/g3ycc/>

-----  
Date: Fri, 13 Aug 1999 11:51:38 +0100  
From: "Bob Duckworth" <wb4mnf@atl.org>  
To: <wb4mnf@atl.org>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [47461] FREE all band QRP TX, using your computer.  
Message-ID: <199908131559.LAA26571@hat-trick.atl.org>

I submitted this earlier and was surprised that there were no

follow ups. Here it is again with a catchier subject line.

The dot clock on your video board may be 'modulated' to produce carriers, with or without modulation, on frequencies through the HF spectrum and in some cases into VHF. Pekka has some code that will let you transmit tone modulated carrier at various frequencies.

I found the espionage aspects of his work extremely interesting. An equipped radio van parked outside Goldman Sachs or ??? could lead to some pretty nice trades.

-bob

-----  
| From: Bob Duckworth <wb4mnf@atl.org>  
| To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
| Subject: Clandestine transmitter? No, that's just my PEECEE.  
| Date: Wednesday, August 11, 1999 5:02 PM  
|  
| Pekka has an interesting bit of SW for you guys who play radio and  
computer  
| and ...SPY  
|  
| <http://poseidon.pspt.fi/~priikone/english/programs.shtml#tempest>  
|  
| -bob  
| wb4mnf  
|

I'm also adding a link to Markus Kuhns page for more info on this.

<http://www.cl.cam.ac.uk/~mgk25/>

-bob

-----  
Date: Fri, 13 Aug 1999 09:02:36 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: QRP-L <qrp-l@lehigh.edu>  
Subject: [47462] Spam  
Message-ID: <37B3DF2C.73C01D91@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Like several postings of late, I have been receiving lots of spam e-mails...mostly concerning the acceptance of credit cards for my business. I don't have one.

I forwarded each message, complete with headers, to: abuse@ (the domain name), like earthlink, msn.com, yahoo.com, aol.com. I received machine-generated responses, and _then_, to my surprise, got personal responses from each. In one case, yahoo found the offender and has promised to take action.

So, it works. If you get spam, forward it to abuse@(your isp and any others you can identify in the header).

Also, since I visit e-bay often, I have begun to receive spam that indicates they got my e-mail address from there. Not good. Now I have to work on that.

Just something that might help get this junk stopped.

--

73, de Roger, N7KT  
qrp-1 #62, NorCal #1099, Zombie #006  
Mesa, AZ 85202

-----  
Date: Fri, 13 Aug 1999 09:14:40 -0700  
From: Ed Loranger <we6w@qsl.net>  
To: qrp-1@lehigh.edu  
Subject: [47463] Further Antenna work.  
Message-ID: <37B44470.4ECC@qsl.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Hi gang. I've concluded that the electric motor controlling the car window is flat-out frozen. So I stepped back on that repair project last night and played with the antenna some more.

First I wanted to dial in my resonance measuring techniques. It is good to know how your equipment respond.

I measured out a full-wave loop for 55 MHz or so. Actually I had some wire on the floor and used:  $984/\text{length}(\text{feet}) = \text{freq. MHz} \dots\dots$

Estimates were 55.8 MHz for the wire. I formed it in a semi-

circle (everything is a semi-circle I guess... ) and hung it on small hooks of my shack ceiling. I didn't care about proximity effects, just that my GDO would respond properly and that the calculations were in the ballpark.

I closed the loop and lightly coupled the GDO to the wire. Wow. I was only 80 KHz off. The spectrum analyzer was doing a slow sweep and I used it for measuring the frequency accurately.

The GDO gave a very nice dip and proved that I'd better only measure full-waves with it. I couldn't get a response with half-wave loops. Only on the full-wave frequency.

A larger loop resonant at 26 MHz was formed and measured with the GDO. I then connected up the Autek RF-1 after opening up the terminals of the loop. I measured 272 OHms at the GDO resonant frequency.

Anyway, I found that the wire length with proximity effects in this measurement cycle pointed to a wire length reduction of 2% for the wavelength formula. I then decided to calculate a fullwave and see how close to resonance it was.

Instead of cutting the wire, I decided to measure the wire, divide by .98 and get the expected resonant frequency.

I was within .1% So that is cool. Teflon coated #20 AWG required a 2% adjustment on the full-wave formula.

I then determined the full-wave length of the wire for 7.04 MHz.

$984/7.04 \times .98 = 136.97$  feet.  
That is 1/2 wave = 68' 5-3/4 inches.

So I put that length on the other side of my end fed half wave so my openwire feed connected to the center of this sloping full-wave dipole.

I got an easy match with the ZM-2 ATU and had great QSO's and excellent reports.

I'll try to get outdoors and do some field-strength tests soon and compare to the end-fed with ground antenna.

72/Ed we6w

--

-Ed AR Millennium Q's=>1000/2000 QRP-L#1068 BB#101  
72, Ed WE6W, A-1 OP; <http://www.qsl.net/we6w> Santa Rosa, CA  
QRP-Z#106 AR#112 HI-QRP#64 NC#2227 ARCI#9397 ARS#275

-----  
Date: Fri, 13 Aug 1999 12:32:18 EDT  
From: charles k brown <n4so@juno.com>  
To: qrp-l@Lehigh.edu  
Subject: [47464] DX QSL Guide  
Message-ID: <19990813.162841.4247.1.n4so@juno.com>

Joe was selling the guide several years ago.  
And the e-mail address is on the bottom.

From: QRZ E-MAIL Callsign Server <lookup@qrz.com>  
Callsign: K3CHP  
Name: JOSEPH S MIKUCKIS  
Addr1: 6913 FURMAN PKY  
Addr2: RIVERDALE MD 20737-3016  
Country: USA  
Class: Advanced  
Effective: 15 Sep 1995  
Expires: 15 Sep 2005  
Zip Coords: 38.961 N 76.918 W Prince Georges County  
Email: k3chp@erols.com  
k3chp.txt

Ken Brown, N4SO  
QTH nr Mobile, AL/ EM50tk  
qrp-l #622  
n4so@juno.com

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-----  
Date: Fri, 13 Aug 1999 13:00:46 -0400  
From: John Harper AA5YX/2 <aa5yx@juno.com>  
To: qrp-l@lehigh.edu  
Subject: [47465] Noodles, Bears and QRP in the Maine Woods  
Message-ID: <19990813.130047.15654.1.aa5yx@juno.com>

>From August 24 to about September 3, I will be hiking the last 100 miles

of the Appalachian Trail  
and ending the hike after 10 days (+/-) atop Mt. Katahdin in Maine.  
This will be a solo hike but I expect a few other hikers on  
the trail this time of year, including thru-hikers who  
started in Georgia.

In addition to the usual sleeping bag, pad, stove, etc, I will  
have along my NC40A/KC1, ZM-2, Whiterook paddles, earphones,  
wire and batteries (10 "C" cells). The antenna will be a random wire  
with counterpoise.

Ideally, it would be great to have a sked every other day  
with someone who could relay info on my progress to my  
YL (in NJ) via email or phone (collect call) and perhaps provide  
me with a weather report for the Monson, Maine area  
available online. I don't yet know exactly when I will be  
stopping to camp each day but after the 1st two days, I  
will know my routine for the following 8 days. At any  
rate, it will be between 4:00 and 6:00 PM Eastern Time.  
I'm not sure what area 40m will favor from my QTH in  
Central Maine at that particular time. Apart from the possible sked, I  
will be  
on 7040 as many evenings as possible beginning sometime  
between 4 & 6 pm (2000-2200UTC).

I spent several weekends at the beginning of the summer checking  
out all the radio gear I'll be bringing and it all performed like a  
champ.

Please listen for me!

John Harper AA5YX/2            ex: KA5BBL, KI50W, VQ9BL  
HW-9, OHR-100A/20m, Norcal 40A, SST/30m, Norcal 20  
YashicaMat 124G Info: <http://home.att.net/~j..harper>

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Date: Fri, 13 Aug 1999 19:08:38 +0200  
From: "Hans Sundstrom" <[hans.sundstrom@telia.com](mailto:hans.sundstrom@telia.com)>  
To: <[kd1jv@moose.ncia.net](mailto:kd1jv@moose.ncia.net)>, "Low Power Amateur Radio Discussion" <[qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)>  
Subject: [47466] SV: G5RV question  
Message-ID: <199908131709.TAA26402@d1o22.telia.com>



Yes, a G5RV with 300 ohms twin lead works **really** good.  
Measurements that I have used is 2 x 15,36 m for the dipole part and 8,57 m for the 300 ohms line and then just a koax hooked directly to the 300 ohms line.

Have not used any short version though.

72

Hans / SM4ATJ

Wondering if anyone has made a G5RV with 300 ohm twin lead feed, instead of the traditonal 450 ohm ladder line?

If so, what length twin lead needed for the 40/20 M shorty version and does the lenght of the wires need to be changed?

72,

Steve, KD1JV in the white Mountains of New Hampshire  
"melt solder"

-----  
Date: Fri, 13 Aug 1999 10:42:55 -0700  
From: Rich Vizcarra <RVizcarra@Filss.com>  
To: "'Elecraft list'" <elecraft@qth.net>  
Cc: "'QRP-L list'" <qrp-l@Lehigh.EDU>  
Subject: [47467] Soldering Iron Sale  
Message-ID: <1134532B7C60D2119F390060979D0B544854F3@net001.LittonSolidState.com>  
MIME-Version: 1.0  
Content-Type: text/plain

Builders - I just received a copy of Marshall's latest catalog and noticed that they have several soldering irons on sale. I bought the Weller # 921ZX1 from Wassco recently and thought that I got a good deal at \$91.50; Marshall has it on sale for \$79.95! This is an ESD safe, temperature controlled iron (adjustable from 550 deg F to 850 deg F) and meets all the Mil specs (their words). In my opinion, a great buy. They also have Weller model # WTCPT which has been discussed previously for the same sale price. Their phone number is (800) 432-2223 and their URL is <http://www.marshall.com>. Go to Production Supplies and then

Soldering Equipment. On the web, you'll have to do a search on the 921ZX1 while the WTCPT is listed on the last page of their soldering irons. I haven't bought anything from these guys in quite some time, so can't vouch for them. So, buyer beware as usual. Good Luck and 73.

Usual Disclaimers: I have no pecuniary relationship with either of these companies.

Ob QRP: The ZX1 can be turned down to 550 deg F which should be able to handle the smallest (qrp) of components.

Rich K6TM  
Santa Clara, CA

-----  
Date: Fri, 13 Aug 1999 13:33:20 -0500  
From: "Joel Kluender, NF9K" <nf9k@eudoramail.com>  
To: qrp-l@lehigh.edu  
Subject: [47468] OT: Vanity Call Procedure?  
Message-ID: <KPJGFDJHMHGINAAA@shared1-mail.whoohere.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

Could anyone with information about how one determines if a call is available for the vanity program, please forward that information on to me.

Thanks,  
Joel NF9K

---

Joel Kluender, NF9K  
870 Prairie Street S.  
Shakopee, MN 55379

Great is the Lord, and worthy of praise!

Join 18 million Eudora users by signing up for a free Eudora Web-Mail account at <http://www.eudoramail.com>

-----  
Date: Fri, 13 Aug 1999 11:56:02 -0700  
From: Ed Loranger <we6w@qsl.net>  
To: qrp-l@lehigh.edu  
Cc: walter@inlink.com

Subject: [47469] Mobile Foam Goes Home QQ Article!

Message-ID: <37B46A42.52AE@qsl.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Content-Transfer-Encoding: 7bit

Hey, that's a great little article by Walter/AG5P!

All the more so since last week I found a brand new 8 foot piece in the road while cycling the 9.3 miles home.

I knew there'd be a use for this thing. (Of course the xyl often wonders about my junk pile.. err junk box.)

Thanks for the tips, Walter.

Oh, on the cover you see my cycling setup for qrp portable. I carry the Quad Chair with Black Widow pole inside the sack differently now. Instead of horizontal across the top, I found that it fits in the rear basket, vertically, strapped to the light plastic carrier/table/antenna support box.

Have bug, will do QRP CW on the trail. Heavy, but not heavy handed <smile>.

72/Ed we6w

--

-Ed AR Millennium Q's=>1000/2000 QRP-L#1068 BB#101  
72, Ed WE6W, A-1 OP; <http://www.qsl.net/we6w> Santa Rosa, CA  
QRP-Z#106 AR#112 HI-QRP#64 NC#2227 ARCI#9397 ARS#275

-----  
Date: Fri, 13 Aug 1999 14:52:40 -0500

From: "Kevin Muenzler WB5RUE" <wb5rue@stic.net>

To: <we6w@qsl.net>, "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>

Subject: [47470] RE: Mobile Foam Goes Home QQ Article!

Message-ID: <000001bee5c5\$67b955f0\$ef5d6f81@uthscsa.edu>

MIME-Version: 1.0

Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Content-Transfer-Encoding: 7bit

My often wonders about my "junk" collection too. She complains every time I buy a "goodie bag" or a junk radio. I explain to her that all I have to do

is use one or two parts from that junk rig or bag and I've paid for it!

73/  
Kevin

> -----Original Message-----  
> From: owner-qrp-l@Lehigh.EDU  
> [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of  
> Ed Loranger  
> Sent: Friday, August 13, 1999 1:56 PM  
> To: Low Power Amateur Radio Discussion  
> Subject: Mobile Foam Goes Home QQ Article!  
...  
> I knew there'd be a use for this thing. (Of course  
> the xyl often wonders about my junk pile.. err junk box.)  
...  
>  
> 72/Ed we6w

-----  
Date: Fri, 13 Aug 1999 16:44:39 -0400 (EDT)  
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>  
To: QRP-L List <qrp-l@lehigh.edu>, gqrp@onelist.com, towertalk@contesting.com,  
antennas@qth.net, antennaware@contesting.com  
Subject: [47471] Multi-banding Moxon Rectangles  
Message-ID: <Pine.GS0.4.10.9908131642160.24579-100000@larry.cas.utk.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have had a number of inquiries about possibilities for developing a multi-band antenna from a core Moxon rectangle. There is now a note--in the Moxon index page listed on the main page--on a couple of possibilities. I hope the notes are useful to some one.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	Tel: (423) 938-6335
1434 High Mesa Drive	/	\	\	----	\	---	http://web.utk.edu/
Knoxville, Tennessee	/\	\	\	/	/		~cebik/radio.html
37938-4443 USA	/	\	\	\			e-mail: cebik@utk.edu

-----  
Date: Fri, 13 Aug 1999 15:50:25 -0500  
From: "Jerry Decker N5RV" <n5rv@hex.net>  
To: "Low Power Amateur Radio" <qrp-l@Lehigh.EDU>  
Subject: [47472] FS/FT - Sort of off topic  
Message-ID: <000501bee5cd\$79f665c0\$0401a8c0@TSRW1>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 8bit  
Content-Transfer-Encoding: 8bit

I've recently purchased a new computer and I have decided I do not need 2. I thought I'd offer my older HP computer to the hams/QRPers in the Dallas/Ft Worth area first before venturing out to a broader audience. Willing to work a deal on a trade for "what have you".

I had originally intended to keep both computers and set the older one (HP) up on Linux and just have it do SETI work (Linux is so much faster at performing this function over Windows). But, I decided that I have enough problems keeping up with my new personal computer and my company provided laptop, HIHI.

My major interests (for trades) are QRP (of course), and SW/MW/LW/VHF/UHF listening. But, that should not stop you from making me a trade offer should you have something else in mind.

OK, here is the poop on the computer:

HP7285 Pentium 200Mhz (non-MMX)  
2x 3.2GB hard drives  
6X CDROM  
128MB EDO memory  
Keyboard and mouse.  
No monitor

I can provide these OS's and media (uninstalled) with the package:  
Win95 (HP distribution)  
Win98 (Upgrade for Win95)  
Red Hat Linux 5.2 (Official distribution)  
Red Hat Linux 6.0 (Official distribution)

Reply via direct email for faster response,

72, 73 de Jerry N5RV in Irving, Texas

..- .-.- .-.- .-.- .-.- .-.- .-.- .-.- .-.- .-.-  
N5RV Jerry Decker - Irving, Texas - EM12MT - N32 48' 17'', W96 57' 31''  
Red Hot NC20 - LDG QRP Tuner - Homebrew G5RV@33ft - 14.060MHz CW  
G-QRP #10353 - QRP-L # 1969 - ARRL Member  
---

-----  
Date: Fri, 13 Aug 1999 17:11:22 -0400  
From: "Ronald Hands" <rhands@hwcen.org>  
To: <qrp-l@lehigh.edu>  
Subject: [47473] FS TT 260 supply  
Message-ID: <000d01bee5d0\$7fb85e20\$c15ed4c7@default>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit  
Content-Transfer-Encoding: 7bit

I'm planning to take this to a flea market tomorrow, but it occurred to me that perhaps I should offer it here first:  
Ten Tec 260 power supply, the matching unit for the Corsair 1, few scratches on side, electrically perfect. \$100 U.S. plus shipping.

Also have a Speed-X chrome hand key, with navy knob. Bought it in 1951 when I started learning the code; used it only once since 1952 (a Straight Key Night that convinced me I should stick to keyers and keyboards).  
Offers?

-- Ron VE3SP  
Hamilton, ON

-----  
Date: Fri, 13 Aug 1999 17:33:10 +0000  
From: "Steven Weber" <kd1jv@moose.ncia.net>  
To: qrp-l@lehigh.edu  
Subject: [47474] G5RV question answerd  
Message-ID: <199908132215.SAA15312@moose.ncia.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-Transfer-Encoding: 7BIT

Thanks for all the info guys! Many good replys.

Looks like I got what I need to try it out.

Also looks like some rain here in NH for the weekend, so Wx permitting, I'll try one out and post the dimentions I come up with, as most likely there are others here that might be interested.

I'll be shotting for a "no tune" 40/20 M version, as not to have to carry a tuner.

I plan on hiking up to a little log cabin which is 2.5 miles and a 2500 ft climb from the road for QRPTTF in September, so what to keep it light and simple.

72,  
Steve, KD1JV in the white Mountains of New Hampshire  
"melt solder"

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End of QRP-L Digest 1547

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